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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,793	02/11/2002	Chul-Ho Lim	66778/RSM	4360

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EXAMINER

NGUYEN, KEVIN M

ART UNIT PAPER NUMBER

2674

DATE MAILED: 12/05/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,793

Applicant(s)

LIM ET AL.

Examiner

Kevin M. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

page 11, line 8 should be read --the third connector 158--

page 12, line 4 should be read --the buffer 52--

Appropriate correction is required.

Drawings

2. The drawings were received on 6/4/2002. These drawings are acknowledged.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Silverbrook (US 6,002,385).

As to claim 1, Silverbrook teach a flat panel display device which includes a flat panel module, a column drivers (57, 59), a row driver (26) (see figure 19, column 15,

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lines 59-55), a buffer (49), a timing controller (47), a first connector (45), a replaceable modular system board (2) (see figure 1, column 3, lines 35-40 and column 4, line 61). Silverbrook fails to teach a chassis adapted to mechanically fix and clamp all component of the flat panel display device and adapted to shield electromagnetic wave generated from the system board, whereby preventing an external discharge of the electromagnetic waves. However, Jondrow teaches a related notebook computer which includes a chassis (a front side housing 128, a back side housing 126, a electromagnetic interference shield 130, 136, 142) adapted to mechanically fix and clamp all component of the flat panel display device (100) and adapted to shield electromagnetic wave generated from the system board, whereby preventing an external discharge of the electromagnetic waves (see figure 2, column 3, lines 25-34). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the electromagnetic interference shield (130, 136, 142) taught by Jondrow for Silverbrook's notebook computer because this would reduce unwanted radiation from leaving the notebook (column 2, lines 38-39 of Jondrow).

As to claim 2, Silverbrook teaches the reference voltage for the gray-scale brightness reference (column 4, lines 43-44).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook in view of Yang et al (US 6,606,088).

As to claim 3, Silverbrook teaches a first connector (45), a second connector (44), and a main circuit unit (2). Silverbrook fails to teach a third connector, an analog/digital converter, an image processor, and a low voltage differential signaling unit. However, Yang et al teach the system board which includes a third connector (125), an analog/digital converter (126), an image processor (14), and a low voltage differential signaling unit (123) (see figure 3, column 3, lines 1-13). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the a third connector (125), an analog/digital converter (126), an image processor (14), and a low voltage differential signaling unit (123) taught by Yang et al for Silverbrook's system board because this would provide to receive various types of video data then select the desired video data (column 2, lines 5-7 of Yang et al), and improve the direct current power source via a pulse-width-modulation signal (column 2, lines 18-22 of Yang et al).

8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook in view of Boehme et al (US 6,512,670).

As to claim 4, Silverbrook teaches all of the claimed limitations of claim 1, except for "the system board is replaceable with a new one to change the display function of the flat panel module into a display function corresponding to the new system board." However, Boehme et al teach a related notebook computer which includes the system board is replaceable with a new one to change the display function of the flat panel module into a display function corresponding to the new system board (see figures 15

and 16, column 5, lines 35-61). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the system board is replaceable with a new one to change the display function taught by Boehme et al for Silverbrook's notebook computer because this would provide a consumer field replaceable unit, lowering cost and time to service (column 1, lines 46-47 of Boehme et al).

As to claim 5, Boehme et al teach the chassis is provided at one side wall thereof with an insertion slot (36) (see figure 10, column 5, line 1-2).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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Kevin M. Nguyen
Patent Examiner
Art Unit 2674

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November 20, 2003